FIG. 1
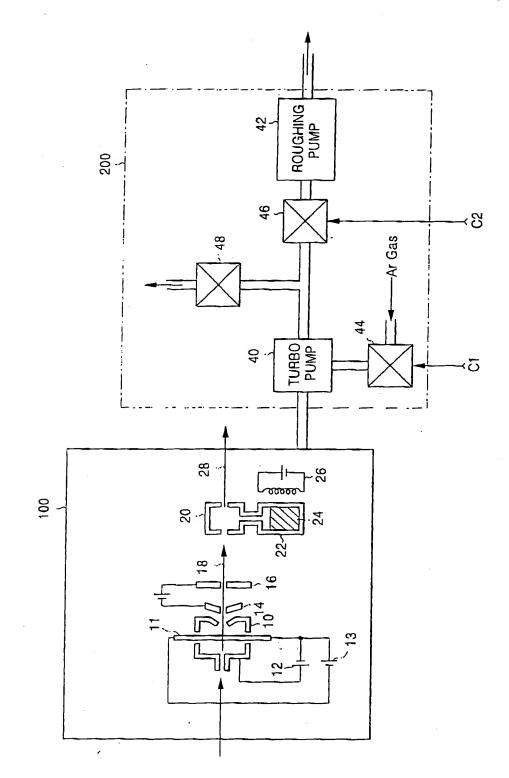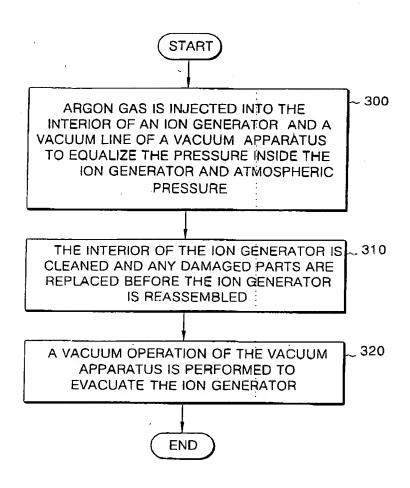## (PRIOR ART)

FIG. 2
(PRIOR ART)

```
                    ┌─────────┐
                    │  START  │
                    └─────────┘
                         │
                         ▼
        ┌───────────────────────────────────┐
        │   ARGON GAS IS INJECTED INTO THE   │ ~ 300
        │   INTERIOR OF AN ION GENERATOR AND A│
        │  VACUUM LINE OF A VACUUM APPARATUS │
        │   TO EQUALIZE THE PRESSURE INSIDE THE│
        │   ION GENERATOR AND ATMOSPHERIC    │
        │             PRESSURE               │
        └───────────────────────────────────┘
                         │
                         ▼
        ┌───────────────────────────────────┐
        │  THE INTERIOR OF THE ION GENERATOR IS│ ~ 310
        │  CLEANED AND ANY DAMAGED PARTS ARE │
        │  REPLACED BEFORE THE ION GENERATOR │
        │          IS REASSEMBLED            │
        └───────────────────────────────────┘
                         │
                         ▼
        ┌───────────────────────────────────┐
        │   A VACUUM OPERATION OF THE VACUUM  │ ~ 320
        │      APPARATUS IS PERFORMED TO     │
        │      EVACUATE THE ION GENERATOR    │
        └───────────────────────────────────┘
                         │
                         ▼
                    ┌─────────┐
                    │   END   │
                    └─────────┘
```

FIG. 3

FIG. 4

```
                    ┌─────────┐
                    │  START  │
                    └────┬────┘
                         │
                         ▼
  ┌──────────────────────────────────────────┐
  │  ARGON GAS IS INJECTED INTO THE           │ ~ 400
  │  INTERIOR OF AN ION GENERATOR AND A       │
  │  VACUUM LINE OF A VACUUM APPARATUS        │
  │  TO EQUALIZE THE PRESSURE INSIDE THE      │
  │  ION GENERATOR AND                        │
  │  ATMOSPHERIC PRESSURE                     │
  └──────────────────────┬───────────────────┘
                         │
                         ▼
  ┌──────────────────────────────────────────┐
  │  THE INTERIOR OF THE ION GENERATOR IS     │ ~ 410
  │  CLEANED AND ANY DAMAGED PARTS ARE        │
  │  REPLACED BEFORE THE ION GENERATOR        │
  │  IS REASSEMBLED                           │
  └──────────────────────┬───────────────────┘
                         │
                         ▼
  ┌──────────────────────────────────────────┐
  │  ARGON GAS IS INJECTED INTO THE           │ ~ 420
  │  INTERIOR OF THE ION GENERATOR AND THE    │
  │  VACUUM LINE OF THE VACUUM APPARATUS      │
  │  TO REMOVE OXYGEN FROM THE INTERIOR OF    │
  │  THE ION GENERATOR AND THE VACUUM LINE    │
  └──────────────────────┬───────────────────┘
                         │
                         ▼
  ┌──────────────────────────────────────────┐
  │  A VACUUM OPERATION OF THE VACUUM         │ ~ 430
  │  APPARATUS IS PERFORMED TO EVACUATE       │
  │  THE ION GENERATOR                        │
  └──────────────────────┬───────────────────┘
                         │
                         ▼
                    ┌─────────┐
                    │   END   │
                    └─────────┘
```